

In The Drawings

Applicant submits herewith a sketch showing proposed changes to Figs. 2 and 3 with changes shown in red in accordance with MPEP 608.02(v).

✓  
In The Claims

Please cancel claim 1.

Please amend the remaining claims to read as follows:

92 2. (Amended) A measurement system comprising:  
a first log amp;  
a second log amp; and  
a differencing circuit coupled to the first and second log amps, wherein the differencing circuit is arranged to continuously process outputs from the first and second log amps.

3. (Amended) A measurement system according to claim 2 wherein:  
the first log amp has a first logarithmic output coupled to a first input to the differencing circuit; and  
the second log amp has a second logarithmic output coupled to a second input to the differencing circuit.

4. (Amended) A measurement system comprising:  
a first log amp;  
a second log amp; and  
a differencing circuit coupled to the first and second log amps, wherein the differencing circuit comprises a summing node.

5. A measurement system according to claim 2 further comprising an output interface circuit coupled to the differencing circuit.

6. (Amended) A measurement system comprising:  
a first log amp;  
a second log amp;  
a differencing circuit coupled to the first and second log amps; and

62/ a phase detector core coupled to the first and second log amps.

7. A measurement system according to claim 6 wherein:  
the first log amp has a first limiting output coupled to a first input of the phase detector core; and  
the second log amp has a second limiting output coupled to a second input of the phase detector core.

62/ 8. A measurement system according to claim 7 wherein the detector core comprises a multiplier.

9. A measurement system according to claim 6 further comprising an output interface circuit coupled to the phase detector core.

Cent 92 10. (Amended) A measurement system comprising:  
a first log amp; and  
a second log amp;  
wherein the first and second log amps are co-integrated on a substrate.

11. A measurement system according to claim 10 wherein the first and second log amps are arranged symmetrically about a center line.

12. A measurement system circuit according to claim 10 wherein the substrate is mounted in a package.

62/ 13. A measurement system according to claim 12 further comprising:  
a first parasitic network coupled to the first log amp; and  
a second parasitic network coupled to the second log amp;  
wherein the first and second parasitic networks have similar frequency responses.

62/ 14. (Amended) A measurement system comprising:  
a first log amp;  
a second log amp;  
a differencing circuit coupled to the first and second log amps; and

a third log amp coupled to the differencing circuit.

*claim 15*  
15. (Amended) A measurement system comprising:  
a first log amp;  
a second log amp;  
a differencing circuit coupled to the first and second log amps; and  
one or more additional log amps coupled to the differencing circuit.

*claim 16*  
16. A measurement system comprising:  
a first log amp having a first limiting output;  
a second log amp having a second limiting output; and  
a phase detector core coupled to the first and second log amps to receive the first and second limiting outputs.

*Cont. 92*  
17. A measurement system according to claim 16 wherein the phase detector core comprises a multiplier.

18. A measurement system according to claim 16 wherein the first and second log amps are co-integrated on a substrate.

19. An integrated circuit comprising two or more log amps.

20. An integrated circuit according to claim 19 further comprising a differencing circuit coupled to the two or more log amps.

*claim 21*  
21. An integrated circuit according to claim 19 further comprising a phase detector core coupled to the two or more log amps.

22. (Amended) A method comprising:  
logarithmically amplifying a first input signal, thereby generating a first output signal;  
logarithmically amplifying a second input signal, thereby generating a second output signal; and  
differentially and continuously processing the first and second output signals.

23. A method according to claim 22 wherein:  
the first and second output signals are logarithmic output signals; and  
differentially processing the first and second output signals comprises differencing the  
first and second output signals.

*alt* 24. (Amended) A method comprising:  
logarithmically amplifying a first input signal, thereby generating a first output signal;  
logarithmically amplifying a second input signal, thereby generating a second output  
signal; and  
differentially processing the first and second output signals  
wherein:  
the first and second output signals are limiting output signals; and  
differentially processing the first and second output signals comprises  
multiplying the first and second output signals.

*cont.*  
*a2*  
25. (Amended) A method comprising:  
logarithmically amplifying a first input signal, thereby generating a first output signal;  
logarithmically amplifying a second input signal, thereby generating a second output  
signal;  
differentially processing the first and second output signals;  
*alt* utilizing a signal to be examined as the first input signal; and  
utilizing a reference signal as the second input signal.

26. A method according to claim 25 wherein the reference signal has the same  
waveform as the signal to be examined.

*alt* 27. (Amended) A method comprising:  
logarithmically amplifying a first input signal, thereby generating a first output signal;  
logarithmically amplifying a second input signal, thereby generating a second output  
signal;  
differentially processing the first and second output signals;  
utilizing a modulated signal for the first input signal; and  
utilizing a modulation signal for the second input signal.

Please add the following new claims:

a3

28. (New) A measurement system according to claim 2 further comprising a power amplifier having an input coupled to an input of the first log amp and an output coupled to an input of the second log amp.

29. (New) A measurement system according to claim 4 wherein the log amps have current outputs.